November 2008

VERTICAL DRAIN

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service—Practice Code 630

VERTICAL DRAIN

A vertical drain is a well, pipe, pit, or bore in porous underground strata into which drainage water can be discharged.

PRACTICE INFORMATION

The purpose of a vertical drain is to provide an outlet for drainage water from a surface or subsurface drainage system.

This practice is applicable in locations where the underlying strata can receive, transmit, or store the design drainage flow. Vertical drains are generally used when other drainage outlets are not available or cannot be provided at a reasonable cost. This practice is also subject to any State or local laws and subject to an evaluation indicating it will not cause pollution of ground water.

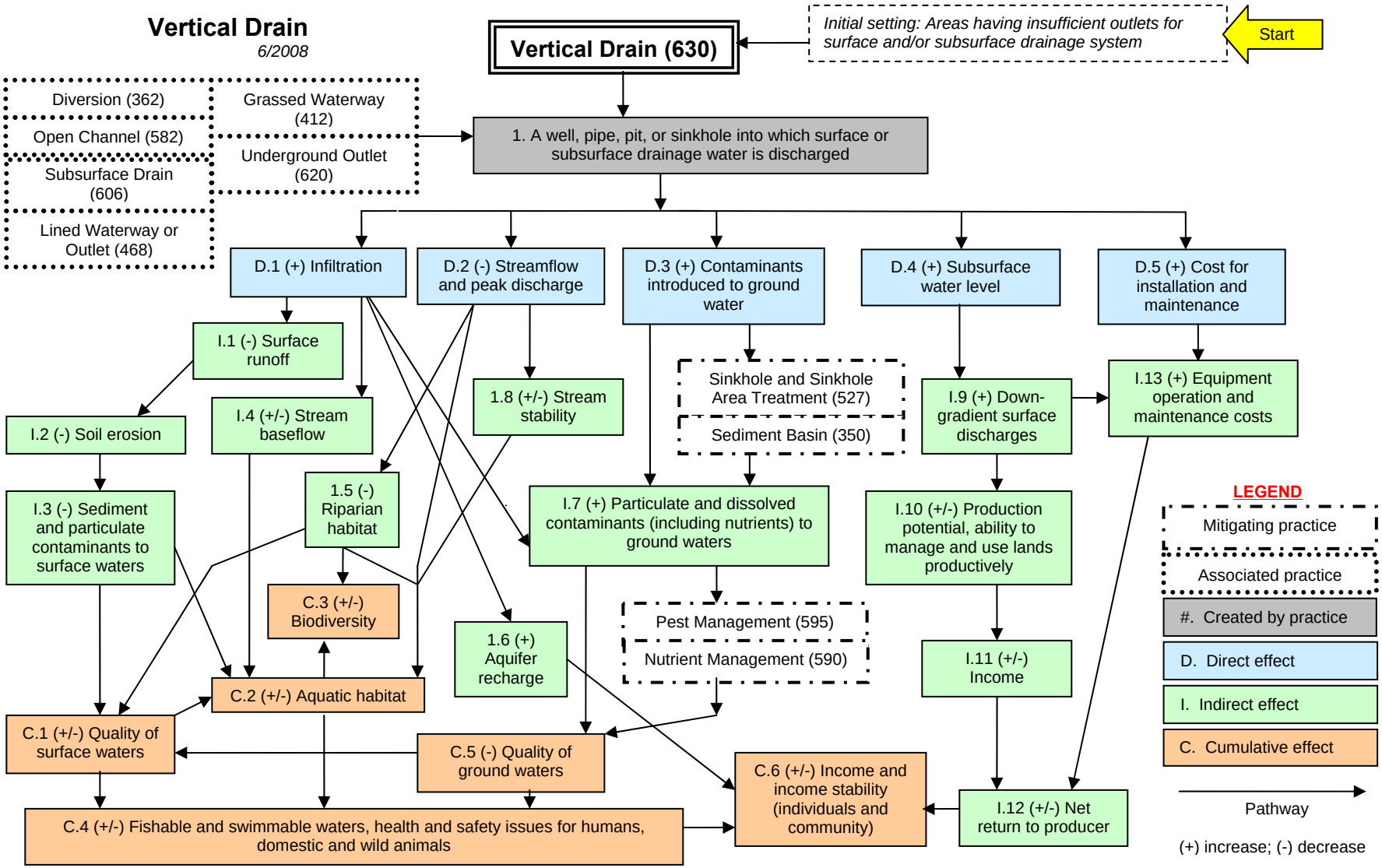
COMMON ASSOCIATED PRACTICES

Vertical Drain is commonly used in a Conservation Management System with one or more of the following practices:

- Diversion (362)
- Open Channel (582)
- Subsurface Drain (606)
- Lined Waterway or Outlet (468)
- Grassed Waterway (412)
- Underground Outlet (620)

For additional information, refer to the practice standard in the local Field Office Technical Guide and associated practice specifications and job sheets.

The following page identifies the effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. All appropriate local, State, Tribal, and Federal permits and approvals are the responsibility of the landowner and are presumed to have been obtained. Users are cautioned that these effects are estimates that may or may not apply to a specific site.



Notes:

Effects are qualified with a plus (+) or minus (-). These symbols indicate only an increase (+) or a decrease (-) in the effect upon the resource, not whether the effect is beneficial or adverse.

On- and off-site effects of this practice should be carefully evaluated due to potential adverse impacts to water quality. Evaluation in a site specific EA may be needed.

The diagram above identifies the effects expected to occur when this practice is applied according to NRCS practice standards and specifications. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. All appropriate local, State, Tribal, and Federal permits and approvals are the responsibility of the landowner and are presumed to have been obtained. All income changes are partially dependent upon market fluctuations which are independent of the conservation practices. Users are cautioned that these effects are estimates that may or may not apply to a specific site.